

[RADIO FREQUENCY TEMPERATURE SENSOR AND METHOD OF CALIBRATING TEMPERATURE THEREFOR]

Abstract

A radio frequency temperature sensor and a method of calibration temperature therefor are disclosed. An active radio frequency temperature sensor including a ring oscillator, a memory, a frequency counter, a radio frequency transmission interface and a micro-controller is used to calibrate and verify the efficacy of the radio frequency temperature sensor. Thereafter, a passive radio frequency temperature sensor including a regulator, a clock extractor, a ring oscillator, a memory, a frequency counter, a modulator and a state-machine is developed according to the verified results.